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TECH CENTER 1600/2900



RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/714,882

DATE: 05/29/2001

TIME: 11:46:13

Input Set : A:\Seqlist.txt

Output Set: C:\CRF3\05292001\I714882.raw

ENTERED

4 <110> APPLICANT: Turner, C. Alexander Jr.
5 Nehls, Michael C.
6 Friedrich, Glenn
7 Zambrowicz, Brian
8 Sands, Arthur T.
10 <120> TITLE OF INVENTION: Novel Human Notch Ligand Proteins and Polynucleotides
11 Encoding the Same
13 <130> FILE REFERENCE: LEX-0091-USA
C--> 15 <140> CURRENT APPLICATION NUMBER: US/09/714,882
C--> 15 <141> CURRENT FILING DATE: 2000-11-16
15 <150> PRIOR APPLICATION NUMBER: US 60/165,959
16 <151> PRIOR FILING DATE: 1999-11-17
18 <160> NUMBER OF SEQ ID NOS: 14
20 <170> SOFTWARE: FastSEQ for Windows Version 4.0
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 2070
24 <212> TYPE: DNA
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
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29 atcaaagcag aggaacataa taaaagacaa aaggaaagaa atgtcaccac acaggtatca 120
30 gtgaacgaaa tcaaacaata tttatcacac atattggAAC aaagaacatc tagtaatgtA 180
31 atcaataaaa gagaatctt cctggagaaa aagaagaatc aacgtaaaaat aagaataaaaa 240
32 ggaattcaaa ataaagatctt cttgaagaga aataagaatc atttacaaaa gcaagcagag 300
33 aaaaatttta cagatgaagg agaccgactt tttaagatgg gcatcaaggt tctccagcag 360
34 tctaaaagcc aaaaacaaaa agaagaagcc tacctacttt ttgccaaagc agctgacatg 420
35 ggaaacttga aagctatggc gaaaatggct gacgcttgc tatttggaaa ttttggcgtg 480
36 caaaatataa cagcagctat ccaatttat gatccttgg ctaaagaagg atcatgtaaa 540
37 gccaaaaacg cattaggatt ttgtcttct tatgaaatag gaatggaata tgatcaagct 600
38 aaggcactga tatattacac ctttggaaatg gctggaggaa acatgatgtc ccagatgatt 660
39 ttgggttaca gatatttgc gggaaatcaat gttctacaga attgtgaatg tgccctaagt 720
40 tattacaaga aagtggcaga ttatattgct gacacatttgg aaaaaatgtgaa aggtgttcca 780
41 gtggaaaaag tgagactaac ggaaagaccc gaaaatctgaa gttctaacag tgagatttg 840
42 gattggacata tataccaata ctataaaattt ttggcagaaaa gaggagatgt tcagatacaa 900
43 gtctcttgc gacaattaca tctaattggc aggaaaggc tagatcagga ttactacaaa 960
44 gcattacact acttcttaaa ggcagcaag gccgggagtg caaatgccat ggcattata 1020
45 ggaaagatgt atttagaggg gaatgctgcc gtgcccacaa ataacgctac tgccttcaag 1080
46 tactttcca tggcagccag taagggcaat gcaatggcc ttcatggct tggctttctt 1140
47 tactttcatg gaaaaggagt tcccctgaat tatgccraag cacttaaata ctttcagaaaa 1200
48 gctgcggaaa aagggtggcc cgacgcacag ttccagttg gttcatgtt ctaactctggc 1260
49 tctggatat ggaaggatta taaaacttgc ttcaaataattt tttaccttgc atctcagagt 1320
50 gggcagcccc tcgcccattta ttatctggcc aagatgtatg caacaggaac aggagtagta 1380
51 agatcatgca gaactgctgt ggagctttat aaagggtgtct gtgaacttagg ccactgggct 1440
52 gagaaattcc tgacagctta ctttgcctat aaggatgggtg atatagattc ttctcttgc 1500
53 cagtatgcac tgcttgaga aatgggtat gaagtagctc aaagcaatc agcattcatt 1560
54 ttgaaatcta aaaaggctaa cattcttgc aaaaagagaaga tttatcctt ggcgttctc 1620
55 ctatgaaatc gagctgccat tcaaggcaat gcatttgctt gagtaaaaat tggagattac 1680

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56	cattactatg	gctatgggac	taagaaagac	tatcaaacag	cagccacaca	ctacagcatt	1740									
57	gcagccaaca	aataccacaa	cgcgaagcc	atgttcaatc	tggcttatat	gtatgaacac	1800									
58	ggcttaggca	tcacaaagga	cattcaactt	gccagaagat	tgtacgacat	ggctgctcaa	1860									
59	acgagtccag	atgcccacat	acctgtgctc	tttgcgtca	tgaaactgga	aactacgcat	1920									
60	ttgctccggg	atatccgtt	tttaatcag	ttcacaacga	gatgaaactg	gctgaaactg	1980									
61	gacaacacca	ttggaccaca	ctggactta	tttgcgttgc	gcctcattgt	tcctggcgtg	2040									
62	atttgttgc	ttagaaatca	ccatgggtag				2070									
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65	<211>	LENGTH:	689													
66	<212>	TYPE:	PRT													
67	<213>	ORGANISM:	Homo sapiens													
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71	1						5			10			15			
72	Thr	Ile	Lys	Thr	Ile	Lys	Ala	Glu	Glu	His	Asn	Lys	Arg	Gln	Lys	Glu
73							20			25			30			
74	Arg	Asn	Val	Thr	Thr	Gln	Val	Ser	Val	Asn	Glu	Ile	Lys	Gln	Tyr	Leu
75							35			40			45			
76	Ser	His	Ile	Leu	Glu	Gln	Arg	Thr	Ser	Ser	Asn	Val	Ile	Asn	Lys	Arg
77							50			55			60			
78	Glu	Asn	Leu	Leu	Glu	Lys	Lys	Asn	Gln	Arg	Lys	Ile	Arg	Ile	Lys	
79	65						65			70			75			80
80	Gly	Ile	Gln	Asn	Lys	Asp	Ile	Leu	Lys	Arg	Asn	Lys	Asn	His	Leu	Gln
81							85			90			95			
82	Lys	Gln	Ala	Glu	Lys	Asn	Phe	Thr	Asp	Glu	Gly	Asp	Gln	Leu	Phe	Lys
83							100			105			110			
84	Met	Gly	Ile	Lys	Val	Leu	Gln	Gln	Ser	Lys	Ser	Gln	Lys	Gln	Lys	Glu
85							115			120			125			
86	Glu	Ala	Tyr	Leu	Leu	Phe	Ala	Lys	Ala	Ala	Asp	Met	Gly	Asn	Leu	Lys
87							130			135			140			
88	Ala	Met	Glu	Lys	Met	Ala	Asp	Ala	Leu	Phe	Gly	Asn	Phe	Gly	Val	
89	145						145			150			155			160
90	Gln	Asn	Ile	Thr	Ala	Ala	Ile	Gln	Leu	Tyr	Glu	Ser	Leu	Ala	Lys	Glu
91							165			170			175			
92	Gly	Ser	Cys	Lys	Ala	Gln	Asn	Ala	Leu	Gly	Phe	Leu	Ser	Ser	Tyr	Gly
93							180			185			190			
94	Ile	Gly	Met	Glu	Tyr	Asp	Gln	Ala	Lys	Ala	Leu	Ile	Tyr	Tyr	Thr	Phe
95							195			200			205			
96	Gly	Ser	Ala	Gly	Gly	Asn	Met	Met	Ser	Gln	Met	Ile	Leu	Gly	Tyr	Arg
97							210			215			220			
98	Tyr	Leu	Ser	Gly	Ile	Asn	Val	Leu	Gln	Asn	Cys	Glu	Val	Ala	Leu	Ser
99	225						225			230			235			240
100	Tyr	Tyr	Lys	Lys	Val	Ala	Asp	Tyr	Ile	Ala	Asp	Thr	Phe	Glu	Lys	Ser
101							245			250			255			
102	Glu	Gly	Val	Pro	Val	Glu	Lys	Val	Arg	Leu	Thr	Glu	Arg	Pro	Glu	Asn
103							260			265			270			
104	Leu	Ser	Ser	Asn	Ser	Glu	Ile	Leu	Asp	Trp	Asp	Ile	Tyr	Gln	Tyr	Tyr
105							275			280			285			
106	Lys	Phe	Leu	Ala	Glu	Arg	Gly	Asp	Val	Gln	Ile	Gln	Val	Ser	Leu	Gly

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107	290	295	300
108	Gln Leu His Leu Ile Gly Arg Lys Gly Leu Asp Gln Asp Tyr Tyr Lys		
109	305	310	315
110	Ala Leu His Tyr Phe Leu Lys Ala Ala Lys Ala Gly Ser Ala Asn Ala		320
111	325	330	335
112	Met Ala Phe Ile Gly Lys Met Tyr Leu Glu Gly Asn Ala Ala Val Pro		
113	340	345	350
114	Gln Asn Asn Ala Thr Ala Phe Lys Tyr Phe Ser Met Ala Ala Ser Lys		
115	355	360	365
116	Gly Asn Ala Ile Gly Leu His Gly Leu Gly Leu Leu Tyr Phe His Gly		
117	370	375	380
118	Lys Gly Val Pro Leu Asn Tyr Ala Glu Ala Leu Lys Tyr Phe Gln Lys		
119	385	390	395
120	Ala Ala Glu Lys Gly Trp Pro Asp Ala Gln Phe Gln Leu Gly Phe Met		
121	405	410	415
122	Tyr Tyr Ser Gly Ser Gly Ile Trp Lys Asp Tyr Lys Leu Ala Phe Lys		
123	420	425	430
124	Tyr Phe Tyr Leu Ala Ser Gln Ser Gly Gln Pro Leu Ala Ile Tyr Tyr		
125	435	440	445
126	Leu Ala Lys Met Tyr Ala Thr Gly Thr Gly Val Val Arg Ser Cys Arg		
127	450	455	460
128	Thr Ala Val Glu Leu Tyr Lys Gly Val Cys Glu Leu Gly His Trp Ala		
129	465	470	475
130	Glu Lys Phe Leu Thr Ala Tyr Phe Ala Tyr Lys Asp Gly Asp Ile Asp		
131	485	490	495
132	Ser Ser Leu Val Gln Tyr Ala Leu Leu Ala Glu Met Gly Tyr Glu Val		
133	500	505	510
134	Ala Gln Ser Asn Ser Ala Phe Ile Leu Glu Ser Lys Lys Ala Asn Ile		
135	515	520	525
136	Leu Glu Lys Glu Lys Met Tyr Pro Met Ala Leu Leu Leu Trp Asn Arg		
137	530	535	540
138	Ala Ala Ile Gln Gly Asn Ala Phe Ala Arg Val Lys Ile Gly Asp Tyr		
139	545	550	555
140	His Tyr Tyr Gly Tyr Gly Thr Lys Lys Asp Tyr Gln Thr Ala Ala Thr		
141	565	570	575
142	His Tyr Ser Ile Ala Ala Asn Lys Tyr His Asn Ala Gln Ala Met Phe		
143	580	585	590
144	Asn Leu Ala Tyr Met Tyr Glu His Gly Leu Gly Ile Thr Lys Asp Ile		
145	595	600	605
146	His Leu Ala Arg Arg Leu Tyr Asp Met Ala Ala Gln Thr Ser Pro Asp		
147	610	615	620
148	Ala His Ile Pro Val Leu Phe Ala Val Met Lys Leu Glu Thr Thr His		
149	625	630	635
150	Leu Leu Arg Asp Ile Leu Phe Phe Asn Gln Phe Thr Thr Arg Trp Asn		
151	645	650	655
152	Trp Leu Lys Leu Asp Asn Thr Ile Gly Pro His Trp Asp Leu Phe Val		
153	660	665	670
154	Ile Gly Leu Ile Val Pro Gly Leu Ile Leu Leu Leu Arg Asn His His		
155	675	680	685

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Input Set : A:\Seqlist.txt
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156 Gly
 159 <210> SEQ ID NO: 3
 160 <211> LENGTH: 2067
 161 <212> TYPE: DNA
 162 <213> ORGANISM: Homo sapiens.
 164 <400> SEQUENCE: 3
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 167 gtgaacgaaa tcaacaataa ttatcacac atattggac aaagaacatc tagaatgt 180
 168 atcaataaaa gagaaaatct cctggagaaa aagaagaatc aacgtaaaaat aagaataaaa 240
 169 ggaattcaaa ataaagatat cttgaagaga aataagaatc atttacaaaaa gcaagcagag 300
 170 aaaaatttta cagatgaagg agaccagcta tttaagatgg gcatcaaggt tctccagcag 360
 171 tctaaaagcc aaaaacaaaa agaagaagcc tacctacttt ttgccaagc agctgacatg 420
 172 ggaaacttga aagctatgga gaaaatggct gacgcttgc tatttggaaa ttttggcgtg 480
 173 caaaatataa cagcagctat ccaattatata gatgccttgg ctaaagaagg atcatgtaaa 540
 174 gccccaaacg cattaggatt ttgtctttt tatggatag gaatggata tgatcaagct 600
 175 aaggcactga tatattacac ctttggaaat gctggaggaa acatgatgtc ccagatgatt 660
 176 ttggggtaca gatatttgc gggaatcaat gttctacaga attgtgaatg tgccctaagt 720
 177 tattacaaga aagtggcaga ttatatttgc gacacattt gaaaaatgtg aggtgttcca 780
 178 gtggaaaaag tgagactaac gggaaagacct gaaaatctga gttctaaccg tgagatttg 840
 179 gattgggaca tataccaata ctataaattt ttggcagaaa gaggagatgt tcagatacaa 900
 180 gtctctcttgc gacaattaca tctaatttgc agggaaaggct tagatcagga ttactacaaa 960
 181 gcattacact acttctttaaa ggcagcaaa gcccggagtg caaatgcatt ggcatttata 1020
 182 ggaaagatgt atttagaggg gaatgctgcc gtggcccaaa ataacgtac tgccctcaag 1080
 183 tactttcca tggcagccag taaggcataa gcaatcgcc ttcatggct tggcttctt 1140
 184 tactttcatg gaaaaggatg tcccctgaat tatgcraag cacttaataa ctttcagaaaa 1200
 185 gctgcggaaa aagggtggcc cgacgcacag ttccagttt gcttcatgtc ctactctggc 1260
 186 tctgaaatg ggaaggatta taaacttgc ttcaaatatt ttaccttgc atctcagatg 1320
 187 gggcagcccc tcgcccattt ttatctggcc aagatgtatg caacaggaac aggagtagta 1380
 188 agatcatgca gaactgtgtt ggagctttt aaaggtgtct gtgaactagg ccactggc 1440
 189 gagaatttcc tgacagctt cttgcctt aaggatggtg atatagattt ttctcttgg 1500
 190 cagttatgcac tgcttgcaga aatggggat gaaatgtctt aaagcaattt agcatttattt 1560
 191 ttggaaatcta aaaaggctaa catttttgc aaagagaaga tttatccat ggcgttctc 1620
 192 ctatgaaatc gagctgccat tcaaggcaat gcatttgc tttatccat gggatattt 1680
 193 cattactatg gctatggac taagaaagac tatcaaacag cagccacaca ctacagcatt 1740
 194 gcagccaaca aataccacaa cgcgcagcc atgttcaatc tggcttataat gtatgaacac 1800
 195 ggcttaggca tcacaaagga catttacttgc gcccggat tttatccat ggcgttctc 1860
 196 acgagtccag atgcccacat acctgtgtc ttggccgtca tgaaacttggaa aactacgcat 1920
 197 ttgtccggg atatccgtt tttaatttca acaacggat ggaactggct gaaactggac 1980
 198 aacaccattt gaccacactg ggacttattt gtgattggcc tcattgttcc tggctgtt 2040
 199 ttgttgcattt gaaatcacca tgggttag 2067
 201 <210> SEQ ID NO: 4
 202 <211> LENGTH: 688
 203 <212> TYPE: PRT
 204 <213> ORGANISM: Homo sapiens
 206 <400> SEQUENCE: 4
 207 Met Lys Pro Leu Ser Leu Leu Ile Glu Ile Leu Ile Ile Leu Gly Val
 208 1 5 10 15
 209 Thr Ile Lys Thr Ile Lys Ala Glu Glu His Asn Lys Arg Gln Lys Glu

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210	20	25	30	
211	Arg Asn Val Thr Thr Gln Val Ser Val Asn Glu Ile Lys Gln Tyr Leu			
212	35	40	45	
213	Ser His Ile Leu Glu Gln Arg Thr Ser Ser Asn Val Ile Asn Lys Arg			
214	50	55	60	
215	Glu Asn Leu Leu Glu Lys Lys Asn Gln Arg Lys Ile Arg Ile Lys			
216	65	70	75	80
217	Gly Ile Gln Asn Lys Asp Ile Leu Lys Arg Asn Lys Asn His Leu Gln			
218	85	90	95	
219	Lys Gln Ala Glu Lys Asn Phe Thr Asp Glu Gly Asp Gln Leu Phe Lys			
220	100	105	110	
221	Met Gly Ile Lys Val Leu Gln Gln Ser Lys Ser Gln Lys Gln Lys Glu			
222	115	120	125	
223	Glu Ala Tyr Leu Leu Phe Ala Lys Ala Ala Asp Met Gly Asn Leu Lys			
224	130	135	140	
225	Ala Met Glu Lys Met Ala Asp Ala Leu Leu Phe Gly Asn Phe Gly Val			
226	145	150	155	160
227	Gln Asn Ile Thr Ala Ala Ile Gln Leu Tyr Glu Ser Leu Ala Lys Glu			
228	165	170	175	
229	Gly Ser Cys Lys Ala Gln Asn Ala Leu Gly Phe Leu Ser Ser Tyr Gly			
230	180	185	190	
231	Ile Gly Met Glu Tyr Asp Gln Ala Lys Ala Leu Ile Tyr Tyr Thr Phe			
232	195	200	205	
233	Gly Ser Ala Gly Gly Asn Met Met Ser Gln Met Ile Leu Gly Tyr Arg			
234	210	215	220	
235	Tyr Leu Ser Gly Ile Asn Val Leu Gln Asn Cys Glu Val Ala Leu Ser			
236	225	230	235	240
237	Tyr Tyr Lys Lys Val Ala Asp Tyr Ile Ala Asp Thr Phe Glu Lys Ser			
238	245	250	255	
239	Glu Gly Val Pro Val Glu Lys Val Arg Leu Thr Glu Arg Pro Glu Asn			
240	260	265	270	
241	Leu Ser Ser Asn Ser Glu Ile Leu Asp Trp Asp Ile Tyr Gln Tyr Tyr			
242	275	280	285	
243	Lys Phe Leu Ala Glu Arg Gly Asp Val Gln Ile Gln Val Ser Leu Gly			
244	290	295	300	
245	Gln Leu His Leu Ile Gly Arg Lys Gly Leu Asp Gln Asp Tyr Tyr Lys			
246	305	310	315	320
247	Ala Leu His Tyr Phe Leu Lys Ala Ala Lys Ala Gly Ser Ala Asn Ala			
248	325	330	335	
249	Met Ala Phe Ile Gly Lys Met Tyr Leu Glu Gly Asn Ala Ala Val Pro			
250	340	345	350	
251	Gln Asn Asn Ala Thr Ala Phe Lys Tyr Phe Ser Met Ala Ala Ser Lys			
252	355	360	365	
253	Gly Asn Ala Ile Gly Leu His Gly Leu Gly Leu Leu Tyr Phe His Gly			
254	370	375	380	
255	Lys Gly Val Pro Leu Asn Tyr Ala Glu Ala Leu Lys Tyr Phe Gln Lys			
256	385	390	395	400
257	Ala Ala Glu Lys Gly Trp Pro Asp Ala Gln Phe Gln Leu Gly Phe Met			
258	405	410	415	

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/714,882

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Input Set : A:\Seqlist.txt

Output Set: C:\CRF3\05292001\I714882.raw

L:15 M:270 C: Current Application Number differs, Replaced Current Application No
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date